UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/838,420	04/19/2001	Frederic Bauchot	FR920000032US1	3568

			EXAMINER
46033	7590	01/27/2005	STEVENS, ROBERT

IBM CORPORATION
INTELLECTUAL PROPERTY LAW DEPT
11400 BURNET ROAD
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ART UNIT	PAPER NUMBER
2176	

DATE MAILED: 01/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *18 November 2004*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11/18/2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *   c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   This action is responsive to communications: **Application No. 09/838,420** amendment

filed 10/04/2004 to the original application filed 4/19/2001 by Bauchot et al. entitled "Method

and System in an Electronic Spreadsheet for Managing and Handling User-Defined Options".

This application claims foreign priority to application no. 00480060.3 filed in France on

7/13/2000.

2.   The Office withdraws the objections to the abstract raised in the First Action On the

Merits (FAOM), as a result of the amended specification.

3.   The Office withdraws the objections to the specification paragraph [0088] raised in the

FAOM, as a result of the amended specification.

4.   The Office maintains the other objections to the specification raised in the FAOM,

because the amended specification has not addressed them (i.e., chose to defer them).

5.   The Office withdraws the objections to the drawings raised in the FAOM, as a result of

the amended specification.

6.   The Office withdraws the FAOM rejections of claim 10 under 35 USC 112 first

paragraph, in light of Applicant's amendment.

7.   The Office withdraws the FAOM rejections of claims 2, 7 and 9 under 35 USC 112

second paragraph, in light of Applicant's amendment.

8.   The Office withdraws the FAOM rejections of claims 1-7, 10 and 11 under 35 USC 101,

in light of Applicant's amendment.

9.   The FAOM rejections of claims 1, 2, 4, 6, 10 and under 35 USC 102(b) as being

unpatentable over Blood, has been withdrawn as necessitated by amendment.

10.   The FAOM rejections of claims 3, 5, 8 and 9 under 35 USC 103(a) as being unpatentable

over Blood in view of Shaw, has been withdrawn as necessitated by amendment.

11.   The FAOM rejection of claim 7 under 35 USC 103(a) as being unpatentable over Blood

in view of Friedman, has been withdrawn as necessitated by amendment.

12.   The Office raises new rejections of the claims under 35 USC 112 second paragraph, 35

USC 101 and 35 USC 103(a), as necessitated by amendment. Further discussion follows.

13.   Claims 1-11 are pending. Claims 1 and 10 are independent.

Claim Rejections - 35 USC § 112

14.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

15.   **Claim 11 is rejected under 35 U.S.C. 112, second paragraph**, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 11 (line 1), the term/phrase "computer –usable medium" was not defined in the specification. As such, the scope of this claim is indeterminable.

Claim Rejections - 35 USC § 101

1.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2.   **Claims 1-11 are rejected under 35 U.S.C. 101** because the claimed invention is directed to non-statutory subject matter.

Regarding independent claim 1: The language of this claim raises a question as to whether this claim is directed merely to an abstract idea that is not tied to a technological art, environment or machine, which would result in a practical application producing a concrete, useful and tangible result to form the basis of statutory subject matter under 35 USC 101.

Claim 1 is not tangibly embodied, as evidenced by the appearance of the term/phrase "electronic spreadsheet" in the last line of the claim. This claim is directed to a "multi dimensional spreadsheet" (see preamble). A multi dimensional spreadsheet may be paper, and have an impact on a second (i.e., electronic) spreadsheet.

By way of example, a claim is not considered to be in the technological arts if the claim language is such that the claim elements could be performed using pencil or paper. However, one technique for satisfying the requirements of 35 USC 101 is to claim code residing in memory (i.e., hardware), wherein that code produces a tangible result.

Claims 2-9 and 11 are dependent upon claim 1, and do not add any limitations that would render these claims statutory under 35 USC 101. Therefore, these claims are likewise rejected.

Regarding independent claim 10: The language of this claim merely describes a computer program per se. As such, this raises a question as to whether the claim is directed merely to an abstract idea that is not tied to a technological art, environment or machine, which would result in a practical application producing a concrete, useful and tangible result to form the basis of statutory subject matter under 35 USC 101.

One technique for satisfying the requirements of 35 USC 101 is to claim code residing in memory (i.e., hardware), wherein that code produces a tangible result.

Further regarding claim 11: This claim is directed to a "computer usable medium",

which may encompass an intangible embodiment (such as a carrier wave or transmission media).

Claim Rejections - 35 USC § 103

16.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

17.   **Claims 1-11 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Julia Kelly

(Using Microsoft Excel 97, 3rd Edition, Que Corp., Indianapolis, IN, © 1998, pp. 138-144 and

154-189, hereafter referred to as "Kelly") in view of H. M. Deitel et al. (C++: How To Program,

2nd Edition, Prentice Hall, Upper Saddle River, NJ, © 1994, pp. 10, 106-110, 147, 243-244, 256-

262, 448, 473-479, 483-485, 707-730, 981-987 and 1043-1045, hereafter referred to as "Deitel").

The Microsoft Computer Dictionary, 4th Edition, Microsoft Press, Redmond, WA, © 1999, pp.

29, 56-58, 79, 229, 272, 420 and 434, hereafter referred to as " MS Dictionary", has also been

used to supply definitions for various computer terms.

Regarding independent claim 1, Kelly discloses:

> *A method of processing user defined boolean variables in a multi dimensional spreadsheet comprising a plurality of cells identified by a cell address along each dimension* (p. 175 Fig. 10.23), *said method comprising the steps of:*
> > *defining one or a plurality of boolean variables* (pp. 174-175 "IF" section and Fig. 10.23, re: use of nested IF formula) ... , *whereby said boolean variables*

are managed (pp. 174-175 "IF" section and Fig. 10.23, re: use of nested IF formula. It is implied that any variables used within an application program are managed by that application program.);

    referencing said one or plurality of boolean variables in one or a plurality of cells; (p. 174 "IF" section, 1st sentence discussing the determining of a cell value based on criteria) *and*

    determining the content of said cell or plurality of cells, wherein each of said boolean variables can be set as "True" or "False;" and impact the content of a cell within an electronic spreadsheet. (pp. 174-175 "IF" section and Fig. 10.23)

However, Kelly does not explicitly disclose:

    ... in a table ...;

Deitel, though, discloses:

    ... in a table ...; (pp. 258-259 Fig. 4.22 re: multidimensional array of integers in context of. p. 109 1st full paragraph discussion of representing booleans as integers. Note that MS Dictionary discusses the well known use of arrays to implement tables)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Deitel for the benefit of Kelly in view of Ammirato, because to do so would enable a programmer to build reusable software components, as taught by Deitel in the 2nd paragraph on p. 10 after "Portability Tip 1.1". These references were all applicable to the same field of endeavor, i.e., application program use and development.

Regarding claim 2, which is dependent upon claim 1, the limitations of claim 1 have been previously addressed.

However, Kelly does not explicitly disclose:

> *assigning a name and storing in the table said name;*
> *selecting a status value; and*
> *storing in the table said status value.*

Deitel, though, discloses:

> *assigning a name* (p. 721 Fig. 14.21 code line 25) *and storing in the table
> said name;* (p. 721 Fig. 14.21 code lines 26-27)
> > *selecting a status value;* (p. 721 Fig. 14.21 code lines 17-18) *and*
> > *storing in the table said status value.* (p. 721 Fig. 14.21 code line 21)

It would have been obvious to one of ordinary skill in the art at the time of the invention

to apply the teachings of Deitel for the benefit of Kelly in view of Ammirato, because to do so

would enable a programmer to build reusable software components, as taught by Deitel in the 2nd

paragraph on p. 10 after "Portability Tip 1.1". These references were all applicable to the same

field of endeavor, i.e., application program use and development.

Regarding claim 3, which is dependent upon claim 1, the limitations of claim 1 have

been previously addressed.

However, Kelly does not explicitly disclose:

> *updating in the table the status value boolean variables.*

Deitel, though, discloses:

> *updating in the table the status value boolean variables.* (p. 722 Fig. 14.13
> and p. 724 Fig. 14.14 illustrates updating variables)

It would have been obvious to one of ordinary skill in the art at the time of the invention

to apply the teachings of Deitel for the benefit of Kelly in view of Ammirato, because to do so

would enable a programmer to build reusable software components, as taught by Deitel in the 2nd

paragraph on p. 10 after "Portability Tip 1.1". These references were all applicable to the same

field of endeavor, i.e., application program use and development.

Regarding claim 4, which is dependent upon claim 1, the limitations of claim 1 have

been previously addressed.

Kelly further discloses:

> *computing the value of said cell or plurality of cells according to the value of said one or plurality of boolean variables.* (pp. 174-175 "IF" section and Fig. 10.23)

Regarding claim 5, which is dependent upon claim 1, the limitations of claim 1 have

been previously addressed.

Kelly further discloses:

> *changing in the table the name of one or a plurality of boolean variables.* (p. 186 Fig. 10.35 "Define Name" dialog box can be used to assign/change a name in "Names in workbook" text field and select/update status values in "Refers to text field")

Regarding claim 6, which is dependent upon claim 1, the limitations of claim 1 have

been previously addressed.

However, Kelly does not explicitly disclose:

> *setting the status value of the boolean variable to "true"; or*
> *setting the status value of the boolean variables to "false.*

Deitel, though, discloses:

> *setting the status value of the boolean variable to "true"; or*
> *setting the status value of the boolean variables to "false.* (p. 109, 1st full
paragraph)

It would have been obvious to one of ordinary skill in the art at the time of the invention

to apply the teachings of Deitel for the benefit of Kelly in view of Ammirato, because to do so

would enable a programmer to build reusable software components, as taught by Deitel in the 2nd

paragraph on p. 10 after "Portability Tip 1.1". These references were all applicable to the same

field of endeavor, i.e., application program use and development.

Regarding claim 7, which is dependent upon claim 1, the limitations of claim 1 have

been previously addressed.

However, Kelly does not explicitly disclose:

> *setting the value of the boolean variable to one when the status value is*
> *"true"; or*
> *setting the value of the boolean variable to zero when the status value is*
> *"false".*

Deitel, though, discloses:

> *setting the value of the boolean variable to one when the status value is*
> *"true"; or*

> *setting the value of the boolean variable to zero when the status value is
> "false".* (p. 109, 1st full paragraph discussing "false", where by implication if the
> value were zero, then it must have been set to zero at some time.)

It would have been obvious to one of ordinary skill in the art at the time of the invention

to apply the teachings of Deitel for the benefit of Kelly in view of Ammirato, because to do so

would enable a programmer to build reusable software components, as taught by Deitel in the 2nd

paragraph on p. 10 after "Portability Tip 1.1". These references were all applicable to the same

field of endeavor, i.e., application program use and development.

Regarding claim 8, which is dependent upon claim 1, the limitations of claim 1 have

been previously addressed.

Kelly further discloses:

> *wherein said steps of assigning a name, changing the name, selecting a
> status value, updating the status value are executed by means of an interactive
> user interface.* (p. 186 Fig. 10.35 "Define Name" dialog box can be used to
> assign/change a name in "Names in workbook" text field and select/update status
> values in "Refers to text field")

Regarding claim 9, which is dependent upon claim 8, the limitations of claim 8 have

been previously addressed.

Kelly further discloses:

> *wherein said interactive user interface comprises a dialog box displayed
> on a screen of a computer system.* (p. 186 Fig. 10.35)

Claim 10 is directed to a system comprising the means for implementing the method set

forth in claim 1. As such, claim 10 is substantially similar to claim 1, and therefore likewise

rejected.

Claim 11 is directed to a computer usable medium comprising instructions for

implementing the method set forth in claim 1. As such, claim 11 is substantially similar to claim

1, and therefore likewise rejected.

Response to Arguments

18. Applicant's arguments filed 10/04/2004 have been fully considered but they are not

persuasive.

Applicant's remarks on pages 7-9 of the amendment concerning the drawings and

specification issues raised in the FAOM have been addressed above.

It is respectfully noted that Applicant's amendment to the claims significantly changes

the scope of the claimed invention as a whole. As such, Applicant's arguments (pages 9-12 of

the amendment) concerning FAOM rejections under 35 USC 101, 35 USC 102(b) and 103(a)

have been rendered moot.

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

US Patents

Coffen et al	6,640,234
Ammirato et al	6,438,565
Anderson et al	6,282,551
Michelman et al	5,987,481
Freivald et al	5,983,268
Goodridge et al	5,848,393
Moss et al	5,613,131
Cseri	5,883,623
Glassey	5,604,854

20.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

21.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Robert M Stevens whose telephone number is (571) 272-4102.

The examiner can normally be reached on M-F 6:00 - 2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Joseph H. Feild can be reached on (571) 272-4090. The current fax phone number

for the organization where this application or proceeding is assigned is 703-872-9306.

Additionally, the main number for Technology Center 2100 is (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Robert M. Stevens
Art Unit 2176
Date: January 21, 2005

JOSEPH FEILD
SUPERVISORY PATENT EXAMINER

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